

# THE POWER OF TYPEFACES: DYSLEXIE

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*Computers have rendered us all gods of type, a privilege we could never have anticipated in the age of the typewriter.<sup>1</sup>*

The fact that we can scroll through the pull-down typeface menu on a word processor and choose any style, has made us much more familiar with typefaces and this has led to us having favourite ones and ridiculing others. Helvetica, for instance, is generally perceived as a typeface loved by hipsters and lazy designers. It even has its own documentary which goes by the same name and evolves around the history and use of the font.<sup>2</sup> Comic sans, another well-known typeface, is often dismissed because of its informal character. Some believe that it should never be used unless you write for children under the age of 10 and some people even want it banned altogether.<sup>3</sup>

Typefaces, in other words, can evoke strong feelings. Simon Garfield's book, *Just My Type: A Book About Fonts*, is aimed at a general audience and was well received, showing that there is an interest in typography among the general public. Next to this, scientific research has been done on how different typefaces shape our experience of reading. It also has become commonplace in the design and communications field that typefaces have different connotations and therefore some kind of power.<sup>4</sup>

In this essay the proclaimed power of typefaces is explored by using the example of a recently developed typeface, Dyslexie, which was designed to help people with reading disorders read faster and with fewer errors. Research about Dyslexie, and its main features will be discussed to make clear where its power lies.

## Functions and features of typefaces

Typography is the art or skill of designing communication by means of the printed word.<sup>5</sup> The typographic style affects the reader's perception of a text. According to Michael Mitchell and Susan Wightman typography has four main functions: readability, organisation, navigation and consistency of a text.<sup>6</sup> To create a readable, well-organised, easily navigable and consistent text, a well-considered typeface is necessary. A variety of typefaces is commonly used in books, ranging from traditional serif faces such as Georgia, Baskerville, Garamond and Times New Roman, and sans serif typefaces (these don't have finishing strokes at the end of the letter) like Helvetica, Futura and Arial.

A typeface consists of several elements that define its appearance. The most significant of these are line, weight, orientation and size. From a combination of these four elements any typeface can be created.<sup>7</sup> The line gives shape to the letter and determines its style (think of the angles of the line and the choice of using serifs). The weight of a typeface refers to the volume of white space its letters replace with ink within a contained area. This weight can vary between light, medium and bold. The next important element is orientation, or the vertical position of a type style. The letter can be either vertical or slanted to the left or right. The last element is size. The size of a typeface is constructed from the x-height, the ascender and the descender. The x-height is the distance between the baseline and the mean line (the line that defines how high average letters like the x, n or v are). The ascender is line that defines how high longer letters are (like the f, k and l) and the descender defines how low the longer letters go (like the j, p and y). Now that we have some guidelines on how fonts are created, they can be used to see how the Dyslexie font is distinguished from others.

## Dyslexie and the power of the typeface

Even though book designers try their best to make text easily readable by structuring it according to the functions mentioned above, this does not always help people with dyslexia. Although dyslexia presents itself in different ways, dyslexic people commonly have the sensation that words appear to be leaping out of the page.<sup>8</sup> Dyslexics often swap, rotate and flip letters without noticing it. For his final thesis project at the Utrecht Arts Academy in 2008, Dutch graphic designer Christian Boer developed a typeface, Dyslexie, that can help people with dyslexia read better.<sup>9</sup> Being a dyslexic himself, he wanted to find a solution to his own problem and at the same time help children and adults with the disorder to read faster and with fewer errors. He noticed that people with dyslexia have no trouble reading words in 3D and so he tried giving 2D letters a 3D appearance. He adjusted all main features of the typeface to make letters and words more distinct for dyslectics.<sup>10</sup>

The letters in Dyslexie have a heavy bottom to distinguish them from each other, slanted parts to make them harder to mirror and bigger openings that give them more air and make them more distinct. The letters also have longer ascenders and descenders for more emphasis. Capitals are always bold and punctuation is particularly large to prevent sentences from blurring together. Letters that look alike, like the 'v' and the 'w' are distinguished from each other by their different heights. The x-height is also raised to make the letters bigger and, again, more distinct. Lastly the spacing between letters was expanded, clarifying the separate parts of a text.

The use of Dyslexie has found some support in research, although not much has been done in this field so far. James Evans explains that about two-thirds of dyslexics struggle to process and interpret visual information.<sup>11</sup> This is made easier with the use of dyslexic-friendly fonts because the letters are carefully individualised. Also, the font is evenly spaced, which is recommended by the British Dyslexia Association.<sup>12</sup> Research into the Dyslexie typeface by Renske de Leeuw has suggested that it helps to decrease some types of reading errors, although it does not improve reading speed.<sup>13</sup> However, the frequency of some specific reading errors decreases, while the frequency of others increases. Overall, dyslexics make fewer errors while reading the words printed in Dyslexie.<sup>14</sup>

Dyslexie has received a considerable amount of media attention. It has been featured on TV programmes around the world and Christian Boer gave a TED talk about his invention.<sup>15</sup> The typeface is now used for printing all kinds of books for dyslexics and is installed on many schools' computers for students to use. With the introduction of typefaces like Dyslexia, science is applied to a type, which has not often been done before. It is commonly accepted that the typeface you choose for a text has an influence on how it is perceived. However, using it as a scientific tool, helping dyslectics read better, is a new development. Even though the goals have not been met entirely, the typeface resulted in people with dyslexia reading with fewer errors. That a special typeface is used for better comprehension of texts shows that there is power in typefaces.

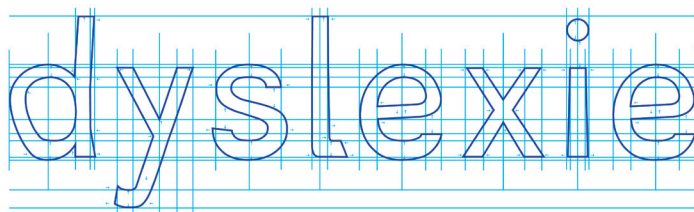


Figure 1. The Dyslexie typeface with its features, making it easier for dyslexics to distinguish letters. Source: *Dyslexiefont*. 2015. Web. 23 October 2015.

#### Notes.

- 1 Garfield, S. *Just My Type: A Book About Fonts*. London: Profile Books, 2012. Print. 14.
- 2 The documentary *Helvetica* was produced and directed by Gary Huswit in 2007 to celebrate the 50th anniversary of the font.
- 3 There is an actual protest group called 'Ban Comic Sans'. They have had demonstrations, made it onto television shows and articles have been written about them. They even have a website [bancomicsans.com](http://bancomicsans.com).
- 4 Thangaraj, J. 'Fascinating fonts; Is the power of typography a marketing myth?'. *Prism* 2. 15 January 2004. Web. 22 October 2015.
- 5 Childers, T.L. and J. Jass. 'All dressed up with something to say: Effects of typeface semantic associations on brand perceptions and consumer memory'. *Journal of Consumer Psychology* 12 (2002): 93-106, 93. Web. 22 October 2015.
- 6 Mitchell, M. and S. Wightman. *Book Typography: A Designers Manual*. Marlborough: Libanus Press, 2005. Print. 18.
- 7 Childers and Jass. 'All dressed up with something to say'. 93.
- 8 Svensson, C. 'Dyslexia and Reading'. *Reading under control: Teaching reading in the primary school*. 3<sup>rd</sup> ed. Eds. J. Graham and A. Kelly. London: David Fulton, 2008. 159-174. Print. 159.
- 9 'Dyslexie font is the typeface for people with dyslexia'. *Dyslexiefont*. 2015. Web. 23 October 2015.
- 10 Ibid.
- 11 Evans, J.W. *Dyslexia and Vision*. London: Whurr, 2001. Print. 57.
- 12 British Dyslexia Association. 'Dyslexia Style Guide'. *British Dyslexia Association*. Web. 20 October 2015.
- 13 de Leeuw, R. *Special Font for Dyslexia?* MSc Thesis. University of Twente, 2010. Web. 20 October 2015.
- 14 Ibid.
- 15 Boer, C. 'How a typeface can help people'. *TEDxDubai*. 24 November 2011. Web. 21 October 2015.